



١.

C

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-K/A

(Amendments No. 1 and 2)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES \times **EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2007

۸r

	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the	transition period from to
	Commission file number 000-27765

SYMYX TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

77-0397908

(IRS Employer Identification Number PROCESSED

3100 Central Expressway Santa Clara, California 95051

(Address of principal executive offices including zip code)

(408) 764-2000

(Registrant's telephone number, including aTHOMSON REUTERS

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT: Class: Name of each exchange on which registered:

Common Stock, \$0.001 Par Value

NASDAQ Global Select Market

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. □ Yes ☒ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. □ Yes ⊠ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

✓ Yes

✓ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

·	
•	large accelerated filer, an accelerated filer, or a non- ""large accelerated filer" and "smaller reporting company" in
☐ Large accelerated filer ☐ Accelerated filer	 Non-accelerated filer (Do not check if a smaller reporting company)
☐ Smaller Reporting Company	
Indicate by check mark whether the registrant is a Act). ☐ Yes ☒ No	shell company (as defined in Rule 12b-2 of the Exchange
(the last business day of the registrant's most recently of closing price for the common stock on the NASDAQ of status for the purposes of this calculation is not necessar calculation excludes approximately 10,760,000 shares be exceeded 5 percent of the registrant's outstanding common the common status of the status of the registrant's outstanding common status of the status of	neld by directors, officers and stockholders whose ownership mon stock as of June 29, 2007. Exclusion of these shares should s controlled by or is under common control with the Registrant.
DOCUMENTS INC	CORPORATED BY REFERENCE
None.	

TABLE OF CONTENTS

ITEM	-	PAGE
	Part III	
10.	Directors, Executive Officers and Corporate Governance	5
11.	Executive Compensation	7
12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	27
13.	Certain Relationships and Related Transactions and Director Independence	30
14.	Principal Accounting Fees and Services	31
	Signatures	33

EXPLANATORY NOTE

Amendments No. 1 and 2 on Form 10-K/A ("Form 10-K/A") to our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, initially filed with the Securities and Exchange Commission ("SEC") on March 17, 2008 (the "Original Filing"), are being filed to include information required by Items 10, 11, 12, 13 and 14 under Part III.

In addition, pursuant to the rules of the SEC, Item 15 of Part IV of the Original Filing has been amended to contain certifications as of a current date from our Chief Executive Officer and Chief Financial Officer, as required by Section 302 of the Sarbanes-Oxley Act of 2002. The certifications of our Chief Executive Officer and Chief Financial Officer are attached to this Form 10-K/A as Exhibits 31.1 and 31.2, respectively.

Except for the foregoing amended information, this Form 10-K/A continues to describe conditions as of the date of the Original Filing, and we have not updated the disclosures contained herein to reflect events that occurred at a later date.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item with respect to our executive officers may be found under the caption "Executive Officers of the Registrant" in Part I, Item 1 of this Annual Report on Form 10-K.

The following is a brief biography of each of our directors as of April 28, 2008, including the nominee recommended for reelection to the Board of Directors at the 2008 Annual Meeting of Stockholders (the "Annual Meeting").

Name	Age	First Became a Director	Principal Occupation / Position Held with us
Isy Goldwasser(1)	38	2007	Chief Executive Officer
David C. Hill(2)	61	2007	Former President and CEO, Sun Chemical Corporation
Chris van Ingen(3)	61	2008	Former President, Bio-Analytical Measurement business of Agilent Technologies, Inc.
Steven D. Goldby(4)	68	1998	Executive Chairman
Timothy Harkness(5)	41	2008	Former Senior Vice President and CFO, Nektar Therapeutics, Inc.
Kenneth J. Nussbacher(6).	55	1995	Fellow, Affymetrix, Inc.
Mario M. Rosati(7)	61	1994	Partner, Wilson Sonsini Goodrich & Rosati
Bruce Pasternack(8)	60	2007	Venture Partner, CMEA Ventures

- (1) Appointed to the Board effective July 2, 2007.
- (2) Appointed to the Board effective August 30, 2007.
- (3) Appointed to the Board effective March 18, 2008.
- (4) Steven D. Goldby became our Executive Chairman effective June 12, 2007.
- (5) Appointed to the Board effective March 18, 2008.
- (6) On April 15, 2008, Mr. Nussbacher informed us that he would not be standing for reelection at the Annual Meeting.
- (7) On April 15, 2008, Mr. Rosati informed us that he would not be standing for reelection at the Annual Meeting.
- (8) Appointed to the Board effective June 29, 2007. Mr. Pasternack is the nominee for election for a three-year term expiring at the 2011 Annual Meeting of Stockholders. The Board appointed Mr. Pasternack as lead independent director on April 23, 2008.

Isy Goldwasser has served as a director since July 2007 and has been with Symyx since our founding. He was appointed President and Chief Operating Officer in 1998 and was appointed Chief Executive Officer in June 2007. Mr. Goldwasser received a B.S. in chemical engineering from the Massachusetts Institute of Technology and an M.S. in engineering from Stanford University.

Dr. David C. Hill has served as a director since August 2007. He served as President and Chief Executive Officer of Sun Chemical Corporation, a producer of printing inks and pigments, from 2006 to 2007. Prior to joining Sun Chemical Corporation in 2001, Dr. Hill spent four years at JM Huber Corporation as President of Engineered Materials. From 1980 to 1997, Dr. Hill was employed at AlliedSignal Inc., where his last position was President of Specialty Chemicals. Dr. Hill began his career at Union Carbide Corporation in 1970, and he has also been Director of Exploratory and New Ventures Research at Occidental Petroleum Corporation. Dr. Hill holds a Ph.D. in Materials Science and Engineering, a M.S. in Engineering and a B.S. in Materials Science and Engineering, all from the Massachusetts Institute of Technology.

Chris van Ingen has served as a director since March 2008. He recently retired from his position as President of the Bio-Analytical Measurement business of Agilent Technologies, Inc., a position he had held since May 2001. Prior to assuming that position, Mr. van Ingen held a number of positions in the Chemical Analysis Group of the Hewlett Packard Company and at Agilent Technologies, including Vice President of Sales and Marketing from 1996 to April 2001, Americas Marketing Center Manager from 1989 to 1996, Product Marketing Manager at the Avondale Division from 1986 to 1989, and Business Development Manager at the Avondale Division from 1986.

Steven D. Goldby joined us in 1998 as our Chief Executive Officer. Mr. Goldby has served as a director and Chairman of the Board since July 1998, and has served as our Executive Chairman since June 2007. Prior to joining us, Mr. Goldby served as Chief Executive Officer and Chairman of the Board of MDL Information Systems, Inc. from 1987 to July 1998. Currently, Mr. Goldby serves as a director of Sunesis Pharmaceuticals, Inc. and Intermolecular, Inc. He is also a partner at Venrock. Mr. Goldby holds an A.B. from the University of North Carolina and a J.D. from Georgetown University Law School.

Timothy Harkness has served as a director since March 2008. Mr. Harkness was most recently Senior Vice President and Chief Financial Officer at Nektar Therapeutics, Inc., a biopharmaceutical company. From 1998 through April 2007, Mr. Harkness served as Chief Financial Officer of Molecular Devices Corporation, an international life sciences tools company, which was acquired by MDS, Inc. Previously, Mr. Harkness was in the health care investment banking group at Montgomery Securities and at Arthur Andersen. He serves as a director of FortéBio, Inc., a life sciences tools company. Mr. Harkness holds a B.B.A. from the University of Wisconsin, and an M.B.A. from Stanford University.

Kenneth J. Nussbacher has served as a director since February 1995. Mr. Nussbacher has been a Fellow of Affymetrix, Inc. since August 2000. Before that, Mr. Nussbacher was Executive Vice President of Affymetrix from 1995 to 2000 and Executive Vice President and Chief Financial Officer from 1995 to 1997. Mr. Nussbacher also serves as a director of Xenoport, Inc. Mr. Nussbacher holds a B.S. from The Cooper Union and a J.D. from Duke University.

Mario M. Rosati has served as a director since September 1994. Mr. Rosati has been with the Palo Alto, California law firm of Wilson Sonsini Goodrich & Rosati, Professional Corporation since 1971, first as an associate and then as a member since 1975. Mr. Rosati also serves as a director of Aehr Test Systems, Sanmina-SCI Corporation and Vivus, Inc. Mr. Rosati holds a B.A. from the University of California, Los Angeles and a J.D. from the University of California, Berkeley, Boalt Hall School of Law.

Bruce Pasternack has served as a director since June 2007. Mr. Pasternack is a Venture Partner at CMEA Ventures. From May 2005 to May 2007, Mr. Pasternack served as the President and Chief Executive Officer of Special Olympics, Inc., a global non-profit organization for athletes with intellectual disabilities. Prior to that, Mr. Pasternack spent more than 28 years at Booz Allen Hamilton, Inc. where his last position was Senior Vice President and Managing Partner of its San Francisco office. He serves as a director of BEA Systems, Inc., Codexis, Inc. and Quantum Corporation and at several non-profit organizations. Mr. Pasternack holds a B.E. from The Cooper Union and a M.S.E. from the University of Pennsylvania.

Audit Committee

We have a standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. The Audit Committee is currently composed of three directors: Messrs. Nussbacher, Harkness and van Ingen. As Mr. Nussbacher will not be standing for reelection, Mr. Pasternack will replace Mr. Nussbacher on the Audit Committee effective at the Annual Meeting. Mr. Harkness is the current chairperson of the Audit Committee. The Board has determined that Messrs. Nussbacher, Pasternack, Harkness and van Ingen meet the independence requirements of Rule 10A-3 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and Nasdaq listing standards with respect to audit committee members. Our Board has also determined that Mr. Harkness meets the definition of "audit committee financial expert" as defined in Item 407(d)(5) of Regulation S-K of the Exchange Act.

Section 16(A) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires our directors, officers and beneficial owners of more than 10% of our common stock to file reports of ownership and reports of changes in the ownership with the Securities and Exchange Commission (the "SEC"). Such persons are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file.

Based solely on its review of the copies of such forms submitted to it during or with respect to 2007, we believe that all officers, directors and beneficial owners of more than 10% of the outstanding common stock complied with all Section 16(a) requirements during or with respect to 2007.

Code of Conduct and Ethics

The company has adopted a Code of Conduct and Ethics that applies to its employees, including principal executive officer, principal financial officer and controller, within the meaning of Section 404 of the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder. A copy of the Code of Conduct and Ethics is available at the company's website: www.symyx.com and without charge upon written request to: Corporate Secretary, 415 Oakmead Parkway, Sunnyvale, CA 94085. To the extent required by the law, amendments to, and waivers from, any provision of the company's Code of Conduct and Ethics will promptly be disclosed to the public. To the extent permitted by such legal requirements, the company intends to make such public disclosure by posting such information on the company's website in accordance with SEC rules.

ITEM 11. EXECUTIVE COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS

Compensation Philosophy and Objectives

The Compensation Committee believes the most effective executive compensation program is designed to reward achievement of our specific long-term and strategic goals, attract and retain executive officers and other key employees who contribute to our long-term success, and align executives' interests with those of the stockholders by rewarding performance above established goals, with the ultimate objective of improving stockholder value. With this in mind, our Compensation Committee ties at least 40% of executive compensation to company performance. We design our compensation programs so that the compensation provided to our executives and other key employees remains competitive relative to the compensation paid to similarly situated executives of our peer companies against which we recruit and compete for talent. We recognize that compensation programs must be understandable to be effective and that program administration and decision making must be fair and equitable.

Role of the Compensation Committee

The Compensation Committee establishes, implements and monitors adherence to our compensation strategy. In the course of its annual review of our compensation practices, the Compensation Committee considers whether our current compensation program is consistent with our compensation philosophy and objectives and determines whether to modify it or introduce new elements of compensation to better meet these objectives. Our Compensation Committee has the authority to select, retain and terminate special counsel and other experts, including compensation consultants, as it deems appropriate to meet these objectives. As discussed below, the Compensation Committee retained Compensia, Inc. in 2005 to provide compensation consulting services, and Compensia has continued to provide compensation consulting services through to present. Compensia reports directly to the Compensation Committee.

The Compensation Committee meets at least two times per year, with greater frequency if necessary. In fiscal year 2007, the Compensation Committee held eight meetings. The agenda for each meeting is usually developed by the Chair of the Compensation Committee, in consultation with the Chief Executive Officer and Chief Financial Officer. The Compensation Committee meets regularly in executive session. However, from time to time, various members of

management and other employees, as well as outside advisors or consultants, may be invited by the Compensation Committee to make presentations, provide financial or other background information or advice or otherwise participate in Compensation Committee meetings. The charter of the Compensation Committee grants the Compensation Committee full access to all of our books, records, facilities and personnel, as well as authority to obtain, at our expense, advice and assistance from internal and external legal, accounting or other advisors and consultants and other external resources that the Compensation Committee considers necessary or appropriate in the performance of its duties. For all executive officers, as part of its deliberations, the Compensation Committee may review and consider, as appropriate, materials such as financial reports and projections, operational data, tax and accounting information, tally sheets that set forth the total compensation that may become payable to executive officers in various hypothetical scenarios, executive and director stock ownership information, company stock performance data, analyses of historical executive compensation levels and current company-wide compensation levels. In determining 2007 and 2008 compensation for our executive officers, the Compensation Committee used a combination of financial reports and projections, publicly available market data regarding the compensation levels for our executive officers. In addition, in setting the compensation of our Chief Executive Officer, the Compensation Committee also relies on a self-assessment submitted by the Chief Executive Officer.

Generally, the Compensation Committee's process comprises two related elements: the determination of compensation levels, including equity awards, and the establishment of performance objectives for the current year. Historically, the Compensation Committee has made its most significant adjustments to annual compensation, determined cash and awards and established new performance objectives at one or more meetings held during the first and fourth quarters of the year. Generally, adjustments to the base salary of our executive officers are determined by the Compensation Committee in February of each year, with the adjustments becoming effective January 1st. However, as discussed further below, for 2008 compensation, the Compensation Committee made its determinations in November as it reviewed and revised cash and equity compensation for substantially all of our personnel following our acquisition of MDL Information Systems, Inc. ("MDL") in October 2007 and the significant restructuring we implemented as a result of that acquisition. Annual short-term performance-based cash bonus awards are generally made in February of the year following the one in which services are performed, while long-term equity incentive compensation is usually determined during the last quarter of each year. The Compensation Committee also considers matters related to individual compensation, such as compensation for new executive hires, as well as high-level strategic issues, such as the efficacy of our compensation strategy, potential modifications to that strategy and new trends, plans or approaches to compensation, at various meetings throughout the year.

Role of Executive Officers in Compensation Decisions

Shortly after the end of the year, the Chief Executive Officer reviews the performance of each of the executive officers other than himself. The Chief Executive Officer then provides the Compensation Committee with a summary of the reviews and his recommendations, based on consultation with the Chief Financial Officer, regarding total compensation and the allocation between base salary, short-term performance-based compensation and long-term equity incentive compensation. Typically the Chief Executive Officer solicits the input of the Compensation Committee prior to making his recommendations. In addition, our Chief Executive Officer, in consultation with our Chief Financial Officer, provides recommendations regarding the determination of annual corporate objectives and goals. The Chief Executive Officer and Chief Financial Officer have no role in recommending their respective compensation and are specifically excluded from any discussions or deliberations related to their respective compensation. However, the Chief Executive Officer will include a recommendation regarding the compensation package of the Chief Financial Officer in his presentation to the Compensation Committee, and provide with his review of the Chief Financial Officer's performance for the preceding performance period. The Chief Executive Officer's recommendations regarding the compensation packages and annual corporate objective and goals are reviewed and, subject to their input and revision, approved by our Compensation Committee and Board. The Compensation Committee makes its determination regarding the Chief Executive Officer's compensation based on company performance, with some adjustment, if any, based the Compensation Committee's assessment of his personal performance for the performance year.

Other than as described above, no other executive officers participated in recommending the amount or form of executive officer compensation. Our Compensation Committee does not delegate any of its functions to others in determining executive officer compensation, and, except as described below, the Compensation Committee has not engaged any consultants with respect to executive compensation matters.

Setting Executive Compensation

To set total compensation guidelines at levels that enable us to attract and retain talent, our Compensation Committee reviews the market data of companies we compete with for talent. The market data consists of publicly disclosed data from companies in two peer groups: (i) publicly traded, similarly sized technology and life science companies and (ii) regional technology and life science companies that we consider to be labor market competitors (together, the "Compensation Peer Group"). The composition of the Compensation Peer Group reflects the breadth of industries in which our business units compete. The Compensation Committee continues to periodically review and update the companies that comprise the Compensation Peer Group. As we continue to focus more heavily on our software business unit, we anticipate that the Compensation Peer Group will be revised to reflect a higher percentage of software companies.

In 2007, the Compensation Peer Group consisted of the following companies:

Similarly sized Peer Group:

- Accelrys
- Advent
- Connetics
- Cubist Pharmaceuticals
- DSP Group
- eResearch Technology
- Exclixis
- InterMune
- Neurocrine Biosciences
- Quality Systems
- Tessera
- Trident Microsystems

Broad Bay Area Peer Group:

- Adobe
- Affymetrix
- Cypress
- Dionex
- Gilead Sciences, Inc.
- Hyperion
- Juniper
- Openwave
- Protein Design Labs
- Sybase
- VeriSign

Because we compete with many larger organizations for top executive-level talent, the Compensation Committee generally sets compensation for executive officers at the 75th percentile of the base salary and target cash incentive compensation paid to similarly situated executives of the organizations comprising the Compensation Peer Group. Variations may occur based on the experience level of the individual and market factors. Our Compensation Committee believes this benchmark is appropriate for several reasons. We have a complex business model and are pursuing multiple commercial and product development opportunities simultaneously with a relatively small organization. Competition for executive talent is intense in the industries in which we compete and in our geographic area. Our executives have many years of valuable experience in our business, and their continued leadership is critical to our short-term and long-term success.

In 2005, the Compensation Committee engaged Compensia, Inc., an outside human resources consulting firm, to conduct an annual review of our total compensation program for executive officers, and Compensia has remained engaged by the Compensation Committee through to present. The Compensation Committee engaged Compensia to provide the Compensation Committee market data regarding all aspects of executive compensation and alternatives to consider when making compensation decisions for executive officers and when assessing the recommendations being made by our Chief Executive Officer and Chief Financial Officer regarding executive compensation. In addition, the Compensation Committee engaged Compensia to assist us with structuring the stock option exchange program that will be the subject of Proposal No. 2 in our proxy statement.

2007 Executive Compensation Components

Our Compensation Committee strives to ensure that the total compensation paid to our executive officers is fair, reasonable and competitive. To that end, our 2007 and 2008 compensation programs consist of:

- base salary;
- short-term cash incentive awards;
- discretionary cash bonuses to reward exemplary effort and achievement; and
- · equity incentive awards.

The Compensation Committee does not have any formal policies for allocating compensation among salary, bonus and cash and equity incentive grants. In addition, in 2007, significant changes were made to our executive staff. Mr. Goldwasser, formerly our president, became our Chief Executive Officer as Mr. Goldby, our former Chief Executive Officer, transitioned to his current role as our Executive Chairman. In addition, our former Chief Financial Officer, Ms. Hilleman, resigned in June 2007 and was replaced by our current Chief Financial Officer, Mr. Jackson, first in an interim role and then officially in October 2007. We also added three new business unit leaders in 2007, one in February, one in April and the last in July. Due to the high level of turnover in our executive staff, the compensation arrangements for most of our executive officers are based in large part on the terms negotiated by our executive officers when they were hired.

Base Salary

The base salary we pay to our executive officers and other employees is intended to compensate them for day-to-day services rendered during the fiscal year. As a result of the turnover in our executive officers discussed above, decisions regarding the base salary paid to our executive officers in 2007 have been, in most cases, based on negotiations in the hiring process rather than the market data and Compensation Peer Group review that the Compensation Committee performed in early 2007. Base salary ranges for our executive officers are determined for each executive based on his or her position and responsibility. In setting the compensation for Mr. Goldby, Mr. Goldwasser and Dr. Weinberg, the three named executive officers that were with us in 2006, the Compensation Committee's decisions regarding base salary were driven largely by the desire to bring the base salary component for these executives in line with one another given the similar nature of their responsibilities and contribution to the achievement of our corporate objectives.

Salary levels are typically considered annually as part of our performance review process and upon a promotion or other change in job responsibility.

During its review of base salaries for our executive officers in 2008, the Compensation Committee considered:

- market data provided by Compensia discussed above;
- internal review of each executive's compensation, both individually and relative to other executive
 officers; and
- individual performance of the executive.

The following is a discussion of the 2007 and 2008 base salaries paid to our named executive officers.

- Steven D. Goldby Mr. Goldby's annual base salary in 2006 was \$400,000. Effective January 1, 2007, Mr. Goldby's salary was increased by 5% to \$420,000. The increase was largely based upon adjustments to reflect cost of living increases and his contributions to achieving our strategic objectives. Effective June 12, 2007, Mr. Goldby stepped down as our Chief Executive Officer and became our Executive Chairman. In connection with this change, Mr. Goldby's annual base salary was reduced to \$250,000. His base salary as a part-time employee was a direct reflection of his continued importance to achieving our strategic objectives in his new role. Effective January 1, 2008, Mr. Goldby's annual base salary was further reduced to \$150,000 as he further reduced the amount of time he spent in his capacity as our part-time employee and focused on his duties as Executive Chairman.
- W. Henry Weinberg Dr. Weinberg's annual base salary in 2006 was \$400,000. His salary was increased by 5% to \$420,000 effective January 1, 2007. The increase was largely based upon adjustments to reflect cost of living increases and his contributions to achieving our strategic objectives and the Compensation Committee's desire to keep Dr. Weinberg's base salary consistent with Mr. Goldby's base salary as discussed above. On January 8, 2008, Dr. Weinberg ceased to be an executive officer and became a part-time employee. As a result of this change, his base salary was decreased to \$252,000. His base salary as a part-time employee is a direct reflection of his continued importance to achieving our strategic objectives in his new role as our Chief Scientific Officer, but has been adjusted on a proportional basis to reflect his part-time status.
- Isy Goldwasser Mr. Goldwasser's annual base salary in 2006 was \$375,000. Effective January 1, 2007, Mr. Goldwasser's salary was increased by 12% to \$420,000. The increase was largely based upon adjustments to reflect cost of living increases and his contributions to achieving our strategic objectives and the Compensation Committee's desire to keep Mr. Goldwasser's base salary consistent with the base salaries paid to Mr. Goldby and Dr. Weinberg as discussed above. In connection with Mr. Goldby's transition to Executive Chairman, Mr. Goldwasser became our Chief Executive Officer effective June 12, 2007. No change was made to Mr. Goldwasser's base salary at that time as his base salary then in effect was consistent with the salary paid to Mr. Goldby in his role as Chief Executive Officer. No further adjustments have been made in 2008 to Mr. Goldwasser's base salary compensation.
- Jeryl L. Hilleman Ms. Hilleman's annual base salary in 2006 was \$330,000. Effective January 1, 2007, Ms. Hilleman's salary increased by 6% to \$350,000. The increase was largely based upon adjustments to reflect cost of living increases and a review of market data provided by Compensia regarding compensation paid to chief financial officers for companies in the technology and life sciences industries in the Bay Area. Ms. Hilleman resigned effective June 1, 2007.
- Richard Boehner Mr. Boehner joined us in April 2007 as our Executive Vice President, Chemicals and Energy. Based on negotiations with Mr. Boehner in connection with his hire, his base salary was set at \$300,000. In November 2007, Mr. Boehner was promoted to President of Symyx Research. However, as his compensation was in line with the compensation paid to our other business unit presidents, no change was made in his base salary. Due to the strong business development component of Mr. Boehner's position, the Compensation Committee put greater emphasis on the incentive component of his compensation package, as described below. As a result, Mr. Boehner's base compensation is slightly less than the base compensation paid to Mr. Campbell. No adjustments have been made in 2008 to Mr. Boehner's base salary compensation.
- Timothy E. Campbell Mr. Campbell joined us in February 2007 as President of Symyx Software. Based on negotiations with Mr. Campbell in connection with his hire, his base salary was set at \$260,400. With the acquisition of MDL Information Systems, Inc. in October 2007 and the resulting increase in Mr. Campbell's responsibilities, Mr. Campbell's annual base salary was raised to \$310,000, effective November 1, 2007. No further adjustments have been made in 2008 to Mr. Campbell's base salary compensation.

• Rex S. Jackson – Mr. Jackson joined us in February 2007 as our Executive Vice President and General Counsel. Based on negotiations with Mr. Jackson in connection with his hire, his base salary was set at \$300,000. He became our acting Chief Financial Officer effective June 1, 2007 and the Board formally appointed Mr. Jackson as our Chief Financial Officer on October 16, 2007. Effective as of his appointment as Chief Financial Officer, Mr. Jackson resigned as our General Counsel. As a result of his new responsibilities, Mr. Jackson's annual base salary was raised to \$330,000 effective November 1, 2007. No further adjustments have been made in 2008 to Mr. Jackson's base salary compensation.

Short-Term Cash Incentive Compensation Awards

The 2007 Executive Annual Cash Incentive Plan (the "Bonus Plan") is subject to Compensation Committee oversight and modification. The Compensation Committee considers annually, typically before or within the first 90 days of the fiscal year, whether an annual cash incentive program will be established under the Bonus Plan for that fiscal year and, if so, approves the group of executives eligible to participate in the plan for that year. Typically, the executive officers eligible to participate in the Bonus Plan include the Chief Executive Officer, the Chief Financial Officer and each of the business unit presidents. Additions to the eligible participants in the Bonus Plan are made if we hire a new executive officer or an employee becomes an executive officer as a result of a promotion.

The Bonus Plan provides for an annual cash bonus target based on a percentage of an executive's annual base salary and our reaching certain specified financial performance goals during the applicable fiscal year. The salary percentage that an executive officer is eligible to receive is a function of his role in the company and, for certain of our current executive officers, the percentage the executive officer negotiated when he was hired. In 2007, with the exception of Mr. Boehner and Mr. Campbell, our executive officers were eligible for up to 65% of the base salary if the company performed at plan, and up to 100% of the base salary if the company over-performed, in the form of a cash incentive payment as this falls within the 75th percentile of the cash incentive compensation paid to similarly situated executives of the organizations comprising the Compensation Peer Group. Due to the strong business development component of Mr. Boehner's position, the Compensation Committee put greater emphasis on the incentive component of his compensation package. As a result, Mr. Boehner was eligible to receive up to 150% of his base salary in the form of a cash incentive payment. In consideration of the time it will take for the strategic initiatives that Mr. Boehner will be working on to reach fruition, for 2007 Mr. Boehner was guaranteed a cash incentive payment equal to 66\(^223\)% of his base salary. In no event can the amount of an annual cash bonus for any executive officer exceed \$1,500,000 for any given year. The salary percentages for our executive officers in 2007 are set forth in the table below.

Name	Salary % at plan
Steven D. Goldby(1)	. —
Jeryl L. Hilleman(2)	
Isy Goldwasser(3)	
W. Henry Weinberg	. 65
Richard Boehner(4)	. 100
Timothy E. Campbell(5)	. 50
Rex Jackson	. 65

- (1) Effective June 12, 2007, Mr. Goldby stepped down as our Chief Executive Officer and was no longer eligible to receive payments under the Bonus Plan.
- (2) Ms. Hilleman resigned effective June 1, 2007.
- (3) Effective January 1, 2008, Mr. Goldwasser's salary percentage was reset at 75% at plan to reflect his role as chief executive officer and the Compensation Committee's desire to move towards a larger percentage of compensation being incentive-based.
- (4) Mr. Boehner was guaranteed a cash incentive payment equal to 66\%% of his base salary for 2007. In future years, Mr. Boehner was eligible to receive up to 100\% of his base salary if our financial performance is consistent with our operating plan for the year and up to 150\% if our financial performance exceeds our operating plan for the year. Effective January 1, 2008, Mr. Boehner's salary percentage was reset at 65\% at plan to bring him in line with the other executive officers, other than Mr. Goldwasser.

(5) Prior to the acquisition of MDL Information Systems, Inc. ("MDL) in October 2007, Mr. Campbell was not an executive officer. As a result, Mr. Campbell's salary percentage for 2007 for determination of his cash incentive payment was less than the percentage specified for our other executive officers. Effective January 1, 2008, Mr. Campbell's salary percentage was reset at 65% at plan to bring him in line with the other executive officers, other than Mr. Goldwasser.

The annual performance goals are set by the Compensation Committee within the first 90 days of the fiscal year and are based on one or more of the following performance-based criteria:

- Revenue
- Gross margin
- Operating income or margin
- Earnings before interest, taxes, depreciation and amortization
- Pre-tax profit
- Net income
- Pro forma net income
- Earnings per share
- Total stockholder return

- Cash flow
- Relative or absolute share price
- Return on equity
- Return on assets
- Return on investments
- Economic value added
- Market share
- Increase in share price
- Expenses

Generally, the Compensation Committee sets the target levels for the financial objectives above our publicly-announced financial guidance. In determining the minimum, target and maximum levels, the Compensation Committee will consider the specific circumstances we expect to face during the coming year. The Compensation Committee meets in the first quarter to determine if the performance goals set for the prior fiscal year have been satisfied.

The financial performance goals set by the Compensation Committee are designed to be aligned our executive officers with our strategic plan and expectations regarding earnings per share and company performance. For 2007, the company-level performance goals established by the Compensation Committee related to revenue for 2007 and non-GAAP (generally accepted accounting principles) earnings per share, which was derived by adjusting our earnings per share calculated in accordance with GAAP to exclude any acquisition-related charges. Within each performance measure, minimum performance was assigned a value of 25, target 50 and maximum 75.

	Minimum	Target	Maximum
2007 Revenue	\$133 million up to \$135	greater than \$135 million	greater than \$140 million
	million	up to \$140 million	
2007 Non-GAAP EPS	\$0.38 up to \$0.40	greater than \$0.40 up to	greater than \$0.43
		\$0.43	

Each of the two performance measures set forth above was determined independently and contributes toward the total score used to calculate eligible bonus amount. Individual bonus determinations are based upon the total score from both performance measures and were paid based upon the following:

Total Score	0	25	50	100	150
Bonus as a Percentage of Salary(1)	0%	16.25%(2)	32.50%(3)	65%(4)	100%(5)

- (1) Based upon the salary as in effect at the end of the fiscal year.
- (2) Mr. Campbell was eligible to receive 12.5% of his base salary.
- (3) Mr. Campbell was eligible to receive 25% of his base salary.
- (4) Mr. Boehner was eligible to receive 100% of his base salary and Mr. Campbell was eligible to receive 50% of his base salary.
- (5) Mr. Boehner was eligible to receive 150% of his base salary.

The Compensation Committee has set the total target bonus score at 100, resulting in a payout of typically 65% of base salary for our executive officers, subject to certain adjustments as described above. The bonus score of 100 is attainable if our financial performance is consistent with our operating plan for the year.

For fiscal 2007, the Company did not meet its original revenue targets for the year, but exceeded the earnings per share maximum target. By formula, this resulted in a score of 50 with respect to the earnings goal set in the first quarter of 2007, resulting in a bonus payout of one-half of the target bonus for each executive officer, including the Chief Executive Officer. However, based on negotiations at the time Mr. Boehner was hired, Mr. Boehner was guaranteed a bonus equal to 100% of his salary for his first year of employment.

The payments made under the Bonus Plan in 2008 to our executive officers for performance in 2007 are set forth in the "Summary Compensation Table" on page 16 under the column entitled "Non-Equity Incentive Plan Compensation."

Discretionary Cash Bonuses

The Compensation Committee has the discretion to award discretionary cash bonuses outside of the Bonus Plan to reward our executive officers for exemplary efforts and contributions to key strategic goals achieved during the fiscal year. In 2007, the Compensation Committee made discretionary bonus awards to three of our executive officers to reward them for their contributions to the MDL acquisition and the integration efforts resulting from that acquisition. In addition, Mr. Jackson was given an additional bonus to reflect the additional responsibilities he took on as acting Chief Financial Officer following Ms. Hilleman's resignation, in addition to his duties as our general counsel.

These discretionary bonus payments are set forth in the "Summary Compensation Table" on page 16 under the column entitled "Bonus."

Equity Incentive Awards

The equity-based incentive component of compensation program is designed to focus the efforts of our executive officers on our long-term success. The Compensation Committee also believes that equity-based incentives have been effective in our recruitment and retention of key employees. Equity incentive awards for our executive officers are primarily in the form of stock options and performance-based restricted stock units, with time-based restricted stock units used in specific circumstances. Stock award levels are determined based on market data and vary based on the executive officer's position. The Compensation Committee is responsible for administering all of our equity incentive plans.

Before 2006, the Compensation Committee used stock options granted under our 1997 Stock Plan (the "1997 Plan") and our 2001 Nonstatutory Stock Option Plan (the "2001 Plan"), a non-shareholder-approved plan, as the preferred equity instrument. Our 1997 Plan expired in February 2007 and substantially all authorized shares under our 2001 Plan have been issued or are subject to outstanding options. In 2007, we adopted the 2007 Plan to replace the 1997 Plan and 2001 Plan and to have a means to provide equity incentives to our officers and director who were not eligible for awards under our 2001 Plan. Historically, stock options granted under the 2007 Plan are awarded with the exercise prices equal to the closing price of our common stock on the Nasdaq Global Select Market on the date of the grant. The options issued under the 2007 plan expire no more than seven years after the date of grant or earlier if employment is terminated. The Compensation Committee has the discretion to grant options with different vesting schedules, but generally, grants under the 2007 Plan will provide for annual vesting of at least 20% of the total number of shares subject to the option.

In 2006, we began granting full-value restricted stock units as part of the equity incentive compensation paid to our executive officer employees. The Compensation Committee's decision was based on a number of factors, including its desire to increase retention, recognize the volatility of our stock price, and facilitate actual stock ownership. The Compensation Committee also considered the impact on dilution and the accounting consequences associated with performance-based restricted stock units in light of FAS 123R. As a result of this decision, no option grants were made to our executive officers in 2006. The restricted stock units granted included both performance and time-based vesting. Restricted stock units that vest over time are used as retention

tools. These grants typically vest in annual installments over three years, with 50% vesting on the first anniversary of the grant date, 33% vesting on the second anniversary and the remainder vesting on the third anniversary. The Compensation Committee also grants restricted stock units that vest upon meeting certain performance milestones that the Compensation Committee believes are key drivers of the company's stock price, such as revenue targets, and are therefore aligned with increasing stockholder value. The conversion ratio at which employees were granted restricted stock units as opposed to stock options ranged from 1:2 to 1:5.

In late 2007, the Compensation Committee, in consultation with Compensia, re-evaluated its decision to use restricted stock units as the primary means of providing equity incentive compensation. Beginning in October 2007, the Compensation Committee began granting stock option awards to our employees, including our executive officers. This decision was based on a number of factors, including the Compensation Committee's belief that the use of stock options offers the best approach to achieve our compensation goals with respect to long-term compensation for our executive officers while providing tax and other advantages to our executive officers relative to other forms of equity compensation. We typically grant options at the commencement of employment and annually thereafter.

In awarding stock grants, the Compensation Committee considers individual performance, overall contribution, executive officer retention, the number of unvested stock options and restricted stock units currently held by the employee and the total number of stock options and stock units available for grant. The Compensation Committee takes all of these factors into account, and therefore does not target any particular peer group percentile.

In 2007, the Compensation Committee awarded the executive officers the restricted stock units set forth in "Grants of Plan Based Awards in 2007" on page 19. No equity incentive grants have been made to date in 2008.

Perquisites and Other Personal Benefits

We provide certain executive officers with perquisites and other personal benefits that we and the Compensation Committee believe are reasonable and consistent with our overall compensation program to better enable us to attract and retain superior employees for key positions. The Compensation Committee periodically reviews the levels of perquisites and other personal benefits provided to executive officers.

During 2007, Dr. Weinberg, our Chief Technology Officer, received housing and other living expenses in the aggregate amount of \$138,000. The President of our Symyx Research division received housing and other living expenses in the aggregate amount of \$21,962, relocation assistance in the aggregate amount of \$15,000 and tax reimbursements and gross-up payments in the aggregate amount of \$23,639. Payments related to the relocation assistance included amounts to cover resulting income and employment-related taxes. We offer these perquisites in certain instances in order to attract, in the case of the President of our Symyx Research division, and retain, in the case of our Chief Technology Officer, exceptional talent and to maintain the high quality of our executive team. These amounts are included in column entitled "All Other Compensation" of the "Summary Compensation Table" on page 17.

Each of our named executive officers is eligible to participate in the Severance Plan (as defined and described below). Dr. Weinberg is also entitled to severance benefits under an individual Change of Control Severance Agreement. The Change of Control Severance Agreement and the Severance Plan are designed to promote the stability and continuity of senior management. Information regarding applicable payments under such agreements for certain executive officers is provided under the heading "Potential Payments upon Termination or Change-in-Control" on page 22.

All employees in the United States are eligible to participate in the Symyx 401(k) Retirement Plan. We match employee contributions up to the lower of 2% of employee's salary or \$4,500, subject to vesting provisions.

Change of Control and Severance Benefit Plan

In May 2007, we adopted an Executive Change in Control and Severance Benefit Plan (the "Severance Plan") under which our executive officers participate, as described in the section of this proxy statement entitled "Potential Payments Upon Termination or Change-in-Control." The Severance Plan was implemented following

a review of practices at comparable companies and was implemented to maintain the competitiveness and effectiveness of our total executive compensation package and to ensure our executive officers were all under a single consistent plan. The Compensation Committee believes that having such an arrangement in place can help us attract and retain key executive officers in a marketplace where these types of arrangements are commonly offered by our peer companies. We also believe that such arrangements allow our executives to assess a potential change of control objectively, without regard to the potential impact of the transaction on their own job security. We sought to implement a plan with terms consistent with those offered at peer companies. Among its key provisions, the plan includes a double trigger for the payment of benefits in the event of termination of employment following a change of control, but not solely as a result of a change of control. The Compensation Committee considered the double trigger to be industry standard and appropriately protect our executive officers.

Tax and Accounting Implications

Deductibility of Executive Compensation

As part of its role, the Compensation Committee reviews and considers the deductibility of executive compensation under Section 162(m) of the Code, which provides that we may not deduct compensation of more than \$1,000,000 that is paid to certain individuals. We believe that compensation paid under the management incentive plans is generally fully deductible for federal income tax purposes. However, in certain situations, the Compensation Committee may approve compensation that will not meet these requirements in order to ensure competitive levels of total compensation for our executive officers. To maintain flexibility in compensating our executive officers in a manner designed to promote our objectives, the Compensation Committee has not adopted a policy that requires all compensation to be deductible. However, the Compensation Committee intends to evaluate the effects of the compensation limits of Section 162(m) on any compensation it proposes to grant, and the Compensation Committee intends to provide future compensation in a manner consistent with our best interests and those of our stockholders.

Accounting for Stock-Based Compensation

We accrue our named executive officers' salaries and incentive awards as an expense when earned, assuming vesting requirements have been met, by the officer. For our equity awards, FAS 123R requires us to recognize compensation expense within our income statement for all share-based payment arrangements, which includes employee stock option plans. In November 2007, the Compensation Committee determined to use stock options as the sole component of its long-term executive compensation program for the foresceable future, and, therefore, to record this expense on an ongoing basis according to FAS 123R. The Compensation Committee considers the accounting impact of FAS 123R in determining the size of the options grants and grants of restricted stock units made to our executive officers. The Compensation Committee may in the future consider reinstituting the use of restricted stock or restricted stock units to our executive officers in lieu of or in addition to stock option grants in light of the accounting impact of FAS 123R with respect to stock option grants and other considerations.

Summary Compensation Table

The following table sets forth the compensation paid by us during the years ended December 31, 2006 and 2007 to our Chief Executive Officer, Chief Financial Officer and the next three most highly compensated executive officers who received compensation of more than \$100,000 during the year ended December 31, 2007:

Name and Principal Position	Year Salary (\$) B		onus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	Non-Equity Incentive Plan Compensation (\$)(2)	(All Other Compensation (\$)(3)			
Steven D. Goldby Executive Chairman and Former Chief			400,000			806,575	\$ _(\$)(1)	\$ 225,000	\$,,,,,	\$1,435,975
Executive Officer(4)	2007	\$	324,129	\$	_	\$ 648,606	\$ _	\$ _	\$	5,051	\$ 977,786
Jeryl L. Hilleman Former Executive Vice President and Chief Financial	2006	\$	330,000	\$		\$ 659,925	\$ _	\$ 185,000	\$	4,400	\$1,179,325
Officer(5)	2007	\$	147,159	\$	_	\$ 531,775	\$ _	\$ _	\$	449,594	\$1,128,527
Isy Goldwasser Chief Executive	2006	\$	375,000	\$	_	\$ 806,575	\$ 	\$ 211,000	\$	4,400	\$1,396,975
Officer(6)	2007	\$	420,000	\$	73,500	\$ 648,606	\$ 32,760	\$ 136,500	\$	5,051	\$1,316,417
W. Henry Weinberg Executive Vice President and Chief	2006	\$	400,000	\$	_	\$ 806,575	\$ _	\$ 225,000	\$	142,400	\$1,573,975
Technical Officer	2007	\$	420,000	\$		\$ 648,606	\$ _	\$ 136,500	\$	143,051	\$1,348,157
Richard Boehner President, Symyx Research(7)		\$	225,000	\$	_	\$ 90,912	\$ 16,380	\$ 150,000	\$	61,006	\$ 543,298
Timothy E. Campbell President, Symyx Software(8)		\$	231,223	\$	100,000	\$ 109,207	\$ 19,656	\$ 77,500	\$	4,954	\$ 542,540
Rex S. Jackson, Executive Vice President and Chief Financial Officer(9).		\$	267,831	\$	175,000	\$ 414,704	\$ 19,656	\$ 107,250	\$	4,954	\$ 989,395

Represents the proportionate amount of the total fair value of the stock and option awards recognized by us as an expense in 2007 and 2006, respectively, for financial accounting purposes, disregarding for this purposes the estimate of forfeitures related to service-based vesting conditions. The fair value of these awards and the amounts expensed in 2007 and 2006, respectively, were determined in accordance with Financial Accounting Standards Board Statement of Financial Accounting Standards No. 123 (revised 2004) Share-Based Payments (FAS 123R). See Note 4 to our combined and consolidated financial statements for the year ended December 31, 2006 contained in our Annual Report on Form 10-K for the year ended December 31, 2007 and 2006, respectively, for a discussion of all assumptions made in connection with the computation of these values.

⁽²⁾ Represents payments made under our 2006 and 2007 Cash Bonus Plans for Executive Officers.

⁽³⁾ Includes perquisites and tax reimbursements/gross-ups outlined in the table below. Also includes premiums paid for group life insurance and matching contributions by us to a 401(k) qualified retirement plan (subject to a maximum of \$4,500 per employee for 2007 and \$4,400 per employee for 2006).

Name	Year	Housing Allowance	 Relocation Expense	Tax nbursements Gross-ups
W. Henry Weinberg	2006	\$ 138.000		
·	2007	\$ 138,000	<u> </u>	_
Richard Boehner	2007	\$ 21,962	\$ 15,000	\$ 23,639

- (4) Effective June 12, 2007, Mr. Goldby stepped down as our Chief Executive Officer and became our Executive Chairman. In connection with this change, Mr. Goldby's annual base salary changed from \$400,000 to \$250,000. Effective January 1, 2008, Mr. Goldby's annual base salary was further reduced to \$150,000.
- (5) Ms. Hilleman resigned effective June 1, 2007. Pursuant to the terms of her severance arrangement, she received 15 months of salary and seven months of COBRA reimbursement, for an aggregate amount of \$449,358. Ms. Hilleman's severance payments are reflected in amounts set forth under the column entitled "Other Compensation."
- (6) Mr. Goldwasser became our Chief Executive Officer effective June 12, 2007.
- (7) Mr. Boehner joined us in April 2007 as our Executive Vice President, Chemicals and Energy, and was appointed President of Symyx Research in November 2007.
- (8) Mr. Campbell joined us in February 2007. Effective November 1, 2007, Mr. Campbell's annual base salary was raised from \$260,400 to \$310,000.
- (9) Mr. Jackson joined us in February 2007 as our Executive Vice President and General Counsel. He became our acting Chief Financial Officer effective June 1, 2007. The Board appointed Mr. Jackson as our Chief Financial Officer on October 16, 2007. Effective as of his appointment as Chief Financial Officer, Mr. Jackson resigned as our General Counsel. Mr. Jackson's annual base salary was raised from \$300,000 to \$330,000 effective November 1, 2007.

Grants of Plan-Based Awards in 2007

The following table sets forth certain information concerning grants of awards made to each executive officer during the fiscal year ended December 31, 2007:

111.04

			uture Payouts centive Plan A		All Other	All Other Option		
Name	Grant Date	Threshold (\$)	Target (\$)	Maximum (\$)	Stock Awards: Number of Shares of Stock or Units (#)	Awards: Number of Securities Underlyin g Options (#)	Exercise or Base Price of Option Awards (\$/Sh)	Grant Date Fair Value of Stock and Option Awards(2)
Steven D. Goldby								0.160016
2007 Plan	2/12/2007				64,600(3)			\$1,160,216
Jeryl L. Hilleman					## 000(# <u>)</u>			A 051 000
2007 Plan	2/12/2007				53,000(5)			\$ 951,880
Isy Goldwasser					22.200(1)			A 500 100
2007 Plan	2/12/2007				32,300(4)			\$ 580,108
2007 Plan	2/12/2007				64,600	200.000	0 0 50	\$1,160,216
2007 Plan	11/2/2007					200,000	\$ 8.58	\$ 655,200
Bonus Plan	2/12/2008	\$ 68,250	\$ 273,000	\$ 420,000				
W. Henry Weinberg	•							
2007 Plan	2/12/2007				32,300(4)			\$ 580,108
2007 Plan	2/12/2007				64,600(3)			\$1,160,216
Bonus Plan	2/12/2008	\$ 68,250	\$ 273,000	\$ 420,000				
Richard Boehner								
2007 Plan	2/12/2007				22,564			\$ 250,009
2007 Plan	11/2/2007					100,000	\$ 8.58	\$ 327,600
Bonus Plan	2/12/2008	\$ 150,000	\$ 225,000	\$ 337,500				
Timothy Campbell								
2007 Plan	2/12/2007				14,116			\$ 260,017
2007 Plan	11/2/2007					120,000	\$ 8.58	\$ 393,120
Bonus Plan	2/12/2008	\$ 38,750	\$ 155,000	\$ 310,000				
Rex Jackson								
2007 Plan	2/16/2007				53,000			\$ 987,390
2007 Plan	11/2/2007					120,000	\$ 8.58	
2007 Plan	2/16/2007				26,500(4)			\$ 493,695
Bonus Plan	2/12/2008	\$ 53,625	\$ 214,500	\$ 330,000				

⁽¹⁾ Reflects payments expected as of December 31, 2007 to be made in February 2008 under our 2007 Cash Incentive Plan for services rendered in 2007 (the Summary Compensation Table above shows the cash actually paid out). See Compensation Discussion and Analysis above for a complete description of the non-equity incentive plan awards and the performance criteria on which such payments were based. There are no set thresholds (or equivalent items) with respect to payouts under the Bonus Plan.

- (3) 32,300 shares of which were cancelled on January 8, 2008.
- (4) Performance-based restricted stock units that did not vest and were therefore terminated.
- (5) Cancelled upon Ms. Hilleman's resignation on June 1, 2007.

⁽²⁾ Represents the estimated fair value of the award as of the applicable grant date, determined in accordance with FAS 123(R), whereas the amounts shown under the column entitled "Option Awards" in the Summary Compensation Table above reflects the dollar amount recognized for financial statement reporting purposes with respect to the 2007 fiscal year. See Note 4 to our combined and consolidated financial statements for the year ended December 31, 2007 contained in our Annual Report on Form 10-K for the year ended December 31, 2007 for a discussion of the valuation assumptions made in connection with the computation of these values.

Outstanding Equity Awards at December 31, 2007

The following table sets forth certain information concerning unexercised options, stock that has not vested and equity incentive plan awards for each executive officer outstanding as of the end of the fiscal year ended December 31, 2007:

		O	ption Awards				Stoc	Stock Awards	
	Number of Securities Underlying Unexercised Options (#)	Number of Securities Underlying Unexercised Options (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options	Option Exercise Price	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested	Equity Incentive Plan Awards: Number of Uncarned Shares, Units or Other Rights	Equity Incentive Plan Awards: Market or Payout Value of Uncarned Shares, Units or Other Rights That Have Not
Steven D Goldby		Ollegel Chadine	<u> </u>	<u>)</u>	Ē.	(3)	(s) \$ 496 178	naisa A	nava A
שניייי בייייי	(1)888 8		1	30.0	0000///	(1)000(1)		ı	
	50.000(1)		1 1		10/21/2009				
	216 724(1)			_	2/28/2010	l			
	50,000(1)				1/11/2011	I	1		
	50,000(1)				6/18/2011				
	50,000(1)	1	1		3/1/2012	ļ	ļ		
	150,000(1)			\$ 13.26	3/3/2013	1			
	12,500(1)	1		\$ 26.70	3/1/2014	l	1		
	12,500(1)		1	\$ 24.09	6/1/2014	1	1		
	12,500(1)	1		\$ 18.95	9/1/2014	1	1		
	12,500(1)		1		12/1/2014	l			
	50,000(1)		1	\$ 27.89	3/1/2015		1		
Jeryl L. Hilleman	1					1	1	ļ	İ
lsy Goldwasser	1	ļ					1	32,300(3)	\$ 248,064
	I	1	1		-	64,600(4) \$	\$ 496,128		
	29,369(1)			\$ 0.96	1/4/2009	l			
	50,000(1)			\$ 12.00	10/21/2009	ĺ			
	108,390(1)				2/28/2010				
	50,000(1)	1		\$ 25.50	1/11/2011		1		
	80,000(1)	1	1	\$ 25.00	6/18/2011	}			
	50,000(1)	}			3/1/2012	1			
	150,000(1)			\$ 13.26	3/3/2013	1			
	12,500(1)				3/1/2014	1	1		
	12,500(1)	1	l	\$ 24.09	6/1/2014	l	ļ		
	12,500(1)		!		9/1/2014	1			
	12,500(1)				12/1/2014				
	50,000(1)	l	1	\$ 27.89	3/1/2015	l			

tet ue or i		64													ŀ	1	ł	1	ı	20	ı
Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested		248,064													•	,	•	•	•	203,520	•
Equity Incentive Plan Awards: Number or of Unearned Shares, Units or Sh Other Rights (That Have Not T		32,300(3) \$													I	1	1	1	İ	26,500(3) \$	I
Market Value of Shares or Units of Stock That Have Not Vested (\$)	-	1	496,128		1	1	1		1	1				†	1	173,292	1	108,411	1		407,040
Number of M Shares or c Units of Stock U That Have Not Vested (\$)	I	1	64.600(2) \$	1	l	I	l	i	I	1	I	1	1	l	I	22,564(4) \$	ļ	14,116(4) \$	ı	1	53,000(4) \$
Option Expiration Date (#)	11/2/2012	!		10/21/2009	2/28/2010	1/11/2011	6/18/2011	3/1/2012	3/3/2013	3/1/2014	6/1/2014	9/1/2014	12/1/2014	3/1/2015	11/2/2012	1	11/2/2012	1	11/2/2012	1	1
Option Exercise Price (\$)	\$ 8.58	1		\$ 12.00	\$ 57.00	\$ 25.50	\$ 25.00	\$ 16.70	\$ 13.26	\$ 26.70	\$ 24.09	\$ 18.95	\$ 31.53	\$ 27.89	\$ 8.58		\$ 8.58	1	\$ 8.58	1	
Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	l	ļ	1	1			ļ	1			İ	1		1	1	•	1				
Number of Securities Underlying Unexercised Options (#)	200,000		I	1	1	1	l	1	1	l	1		l	1	100,000	l	120,000		120,000		I
Number of Securities Underlying Unexercised Options (#)	200,000(5)	<u> </u>	ļ	50,000(1)	270,890(1)	50,000(1)	(1)000(1)	50,000(1)	150,000(1)	12,500(1)	12,500(1)	12,500(1)	12,500(1)	50,000(1)	100,000(5)	1	120,000(5)	` `	120,000(5)	ĺ	1
Name		W. Henry Weinberg													Richard Boehner		Timothy Campbell	•	Rex Jackson		

Option Awards

Fully vested. £ 6 6

50% of the shares subject to this award vested on March 1, 2008 and the remaining balance of 32,300 RSUs were cancelled on January 8, 2008.

Shares were to incrementally vest upon successful completion of certain performance based milestones; milestones not achieved and award forfeited on March 13, 2008.

50% of the shares vested on March 1, 2008, 33% of the shares shall vest on March 1, 2009 and the remaining balance shall vest on March 1, 2010. 20% of the shares vested on March 1, 2009, 40% of the shares shall vest on March 1, 2010 and the remaining balance shall vest on March 1, 2011.

€ €

Option Exercises and Stock Vested in 2007

The following table sets forth certain information concerning each option exercise and vesting of stock, including restricted stock, for each executive officer during the fiscal year ended December 31, 2007 (there were no option exercises by our named executive officers in 2007):

	Option	Awards	Stock Aw	vards
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(1)
Steven D. Goldby			33,000(2)	\$ 549,450
Isy Goldwasser		\$ 264,815	33,000(2)	\$ 549,450
W. Henry Weinberg		\$ 79,420	33,000(2)	\$ 549,450
Jeryl L. Hilleman			27,000(2)	\$ 449,550

- (1) Reflects the market value on the vesting date.
- (2) Stock award vested on March 1, 2007

Potential Payments Upon Termination or Change-in-Control

On May 2, 2007, our Board approved the Severance Plan. The Severance Plan provides for the payment of certain benefits to certain eligible employees, which include the Named Executive Officers, in exchange for an effective release of claims in the event of a Constructive Termination or Involuntary Termination Without Cause. The severance compensation includes a lump sum cash severance payment equal to the participant's coverage period (nine months, in the case of a termination that is not a Change in Control Termination, or 15 months, in the case of a Change in Control Termination) multiplied by the participant's annual base pay (excluding incentive pay, premium pay, commissions, overtime, bonuses and other forms of variable compensation) as in effect immediately before the termination event. Additionally, the Severance Plan provides for continued health benefit eligibility, paid COBRA premiums for continuation coverage (including coverage for his eligible dependents) for a period equal to the participant's coverage period and accelerated vesting and exercisability of all of his or her then-outstanding equity awards.

Under the Severance Plan:

- 1. a "constructive termination" means, subject to certain limitations set forth in the Severance Plan, a participant's resignation of employment within ninety (90) days after one of the following occurs without the participant's express written consent:
 - we reduce the participant's base salary, target bonus and/or other cash compensation
 programs, taken as a whole, unless such reduction is made in connection with an across-theboard, proportionate reduction of substantially all executives' annual base salaries, bonuses,
 plans and/or other cash compensation programs instituted because we, taken as a whole, are
 in financial distress;
 - we reduce or eliminate the participant's eligibility to participate in or the benefits associated
 with participating in our benefit programs that is inconsistent with the eligibility to participate
 in and benefits associated with participation enjoyed by similarly situated employees; or
 - we relocate the participant's primary business office more than fifty (50) miles from the
 location at which the participant predominately performed duties prior to such relocation,
 except for required participant travel on our business to an extent substantially consistent with
 the participant's prior business travel obligations
- 2. involuntary termination without cause" means our termination of a participant's employment

relationship for any reason other than the participant:

- willfully refuses to perform in any material respect the participant's duties or responsibilities
 for or willfully disregards in any material respect any financial or other budgetary limitations
 established in good faith by the Board;
- engages in conduct that causes, or is reasonably likely to cause, material and demonstrable injury, monetarily or otherwise, to us, including, but not limited to, misappropriation or conversion of our assets (other than non-material assets); or
- engages in an act of moral turpitude or conviction of or entry of a plea of nolo contendere to a felony; and
- 3. Change in Control Termination" means any of the following:
 - our shareholders' approve a plan of complete liquidation or of an agreement for the sale or disposition of all or substantially all of our assets;
 - our shareholders approve a merger or consolidation of us with any other corporation, other
 than a merger or consolidation which would result in our voting securities outstanding
 immediately prior thereto continuing to represent (either by remaining outstanding or by
 being converted into voting securities of the surviving entity) more than fifty percent (50%)
 of the total voting power represented by our voting securities or such surviving entity
 outstanding immediately after such merger or consolidation;
 - any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of thirty percent (30%) or more of our then outstanding voting securities; or
 - a change in the composition of the Board, as a result of which fewer than sixty-six percent (66%) of the directors are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of those directors whose election or nomination was not in connection with any transactions described in subsections (i), (ii) or (iii), or in connection with an actual or threatened proxy contest relating to the election of Company directors.

On March 18, 2008, Dr. Weinberg entered into an agreement, the terms of which are substantially similar to the Severance Plan, except that under Dr. Weinberg's agreement, "constructive termination" means, subject to certain limitations set forth in the Severance Plan, a participant's resignation of employment within ninety (90) days after one of the following occurs without the participant's express written consent:

- we materially reduce the participant's base compensation;
- we materially reduce the participant's authority, duties or responsibilities but only if the
 reduction of authority, duties or responsibilities occurs within the period commencing three
 (3) months prior to a Change in Control and ending twelve (12) months following such
 Change in Control; or
- we relocate the participant's primary business office more than fifty (50) miles from the location at which the participant predominately performed duties prior to such relocation, except for required participant travel on our business to an extent substantially consistent with the participant's prior business travel obligations.

Our restricted stock unit agreements provide that upon a change of control, the shares subject to vesting under such agreements will accelerate in full if the acquiring entity does not assume these agreements.

The following table provides information on severance benefits that would become payable under the existing employment, severance and change in control agreements if the employment of our executive officers had terminated on December 31, 2007.

	Constructive Termination or Involuntary Termination Without Cause after a Change in Control				Constructive Termination or Involuntary Termination Without Cause other than after a Change in Control					
Name and Principal Position		ealth Care Benefits (\$)(1)		Salary (\$)(2)	Equity Acceleration (\$)(3)	Н	ealth Care Benefits (\$)(4)		Salary (\$)(5)	Equity Acceleration (\$)(3)
Steven D. Goldby(6)				_	-		· · · · —			
Jeryl L. Hilleman(7)				_	_		_			_
Isy Goldwasser	\$	26,550	\$	525,000	496,128	\$	15,930	\$	315,000	496,128
W. Henry Weinberg(8)	\$	26,550	\$	630,000		\$	15,930	\$	315,000	496,128
Richard Boehner	\$	26,550	\$	375,000	173,292	\$	15,930	\$	225,000	172,292
Timothy E. Campbell	\$	26,550	\$	387,500	108,411	\$	15,930	\$	232,500	108,411
Rex Jackson	\$	26,550	\$	412,500	407,040	\$	15,930	\$	247,500	407,040

- (1) Represents the full amount of premiums for continued coverage under our group health plans for each executive officer and his eligible dependents for 15 months following termination of service, provided the executive officer timely elects continued coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, or COBRA.
- (2) Represents the lump sum cash severance benefit equal to 15 times the monthly base salary in effect as of December 31, 2007.
- (3) Represents (a) the fair market value of those shares subject to outstanding restricted stock units and (b) the excess of the fair market value of those shares subject to outstanding unvested options that were "in the money" on December 31, 2007, calculated based on the closing price of our common stock of \$7.68 on December 31, 2007, the last trading day of fiscal 2007, over the aggregate exercise price of such options.
- (4) Represents the full amount of premiums for continued coverage under our group health plans for each executive officer and his eligible dependents for nine months following termination of service, provided the executive officer timely elects continued coverage under COBRA.
- (5) Represents the lump sum cash severance benefit equal to nine times the monthly base salary in effect as of December 31, 2007.
- (6) Mr. Goldby ceased to be a participant in the Severance Plan effective June 12, 2007.
- (7) Ms. Hilleman resigned effective June 1, 2007. All severance payments made to her upon her resignation are reflected under the column entitled "Other Compensation" in the Summary Compensation Table above.
- (8) Upon a constructive termination or involuntary termination without cause after a change in control, Dr. Weinberg will receive, in lieu of equity acceleration, a cash payment in the amount of 32,300 times the price per share paid by an acquiror.

Director Compensation in 2007

The following table sets forth certain information concerning the compensation of our directors for the fiscal year ended December 31, 2007:

Name	es Earned r Paid in Cash (\$)	 Stock Awards (\$)(1)	_	All Other mpensation (\$)	Total (\$)
Thomas R. Baruch	\$ 51,250	\$ 44,634			\$ 95,884.00
Samuel D. Colella(2)	\$ 23,750	\$ 44,634			\$ 68,384.00
Edwin F. Gambrell(3)	\$ 26,698	\$ 44,634			\$ 71,332.00
David C. Hill(4)	\$ 12,636	\$ 20,537	\$	1,172(6)	\$ 34,339.00
Anthony R. Muller	\$ 53,750	\$ 43,815			\$ 97,565.00
Kenneth J. Nussbacher	\$ 50,000	\$ 44,634		_	\$ 94,634.00
Bruce Pasternack(5)	\$ 23,970	\$ 24,850			\$ 48,820.00
Mario M. Rosati	\$ 30,000	\$ 44,634		_	\$ 74,634.00

- (1) Represents the proportionate amount of the total fair value of the stock and option awards recognized by us as an expense in 2007 for financial accounting purposes, disregarding for this purpose the estimate of forfeitures related to service-based vesting conditions. The fair value of these awards and the amounts expensed in 2007 were determined in accordance with FAS 123R. See Note 4 to our combined and consolidated financial statements for the year ended December 31, 2007 contained in our Annual Report on Form 10-K for the year ended December 31, 2007 for a discussion of all assumptions made in connection with the computation of these values.
- (2) Mr. Colella retired from the Board on June 26, 2007. Mr. Colella's compensation is pro rated for the portion of the year that he served on the Board.
- (3) Mr. Gambrell retired from the Board on October 19, 2007. Mr. Gambrell's compensation is pro rated for the portion of the year that he served on the Board.
- (4) Dr. Hill was appointed to the Board on August 30, 2007. Dr. Hill's compensation is pro rated for the portion of the year that he served on our Board.
- (5) Mr. Pasternack was appointed to the Board on June 29, 2007. Mr. Pasternack's compensation is pro rated for the portion of the year that he served on our Board.
- (6) Consists of payment of consulting fees in connection with Dr. Hill's consulting services to us.

Each non-employee member of the Board receives an annual fee of \$30,000 paid on a quarterly basis for service as a director. Effective April 1, 2006, each member (other than the chairperson of each standing committee) of the Audit Committee, Compensation Committee and Governance Committee receives an additional annual fee of \$10,000, \$7,500 and \$7,500, respectively, paid on a quarterly basis. Effective April 1, 2006, the chairperson of the Audit Committee, Compensation Committee and Governance Committee receives higher annual fee of \$20,000, \$10,000 and \$10,000 respectively, paid on a quarterly basis. Each non-employee member of the Board also receives an annual restricted stock unit award equal to a value of \$50,000 that will fully vest on the date of the following year's annual meeting of stockholders if he or she is still a director on that day. These grants are pro rated to reflect the term of service for any new directors hired between annual meeting dates.

Compensation Committee Interlocks and Insider Participations

During fiscal 2007, the following individuals served as members of our Compensation Committee: Messrs. Baruch, Colella, Pasternack, Gambrell and Dr. Hill. None of them has at any time been an officer or employee of ours. None of our executive officers serves, or in the past fiscal year has served, as a member of the board of directors or the compensation committee of any entity that has one or more of its executive officers serving on our Board or Compensation Committee.

Mr. Baruch, a former member of our Compensation and Audit Committees, is the founder and Managing Director of CMEA Ventures. Mr. Pasternack, the current chairperson of our Compensation Committee is also a Venture Partner of CMEA Ventures. CMEA Ventures holds a 17.5% interest in Intermolecular, Inc. Mr. Baruch

serves on Intermolecular's board of directors and compensation committee. We entered into a Collaborative Development and License Agreement with Intermolecular in March 2005, and an Alliance Agreement in December 2005. Under these agreements, the two companies work together to conduct R&D and other activities with respect to materials and high-throughput technology for use in semiconductor applications. Generally, each party bears its own expenses. These agreements were amended in November 2007. Under these agreements, as amended, we committed to fund \$2,057,000 in research and capital equipment expenditures. We expect to satisfy the remaining \$643,000 of this commitment in 2008. Further, in August 2006, we invested \$13,500,000 in exchange for approximately 13% of Intermolecular's outstanding shares. For the years ended December 31, 2007, 2006 and 2005, we recognized revenue from Intermolecular of \$912,000, \$52,000 and \$88,000, respectively. In 2005, we also recognized a \$20,000 gain from the sale of a fixed asset with a \$130,000 net book value, which was sold to Intermolecular for its original cost of \$150,000. As of December 31, 2007 and 2006, we had deferred revenue of \$84,000 and \$27,000 from Intermolecular, respectively.

Mr. Baruch is also a director of Solyndra, Inc. CMEA Ventures holds a minority interest in Solyndra. We are parties to a Collaborative Research and License Agreement with Solyndra. For the years ended December 31, 2007, 2006 and 2005, we recognized revenue of \$409,000, \$1,228,000 and \$43,000, respectively, from providing research services to Solyndra. As of December 31, 2007 and 2006, we had recorded \$0 and \$24,000, respectively of deferred revenue related to Solyndra. Development activities under that agreement ceased as of February 28, 2007.

In November 2006, we invested \$400,000 in cash and licensed certain sensor technology in exchange for approximately 38% of the outstanding shares of Visyx Technologies Inc. We have a 45% voting right in relation to its shareholdings. CMEA Ventures holds approximately 42% of the outstanding shares of Visyx and has a 49% voting right in relation to its shareholdings. In July 2007, we provided Visyx a \$100,000 loan in exchange for a convertible promissory note on the same terms and conditions as the other principal investor. In November 2007, MeasurementSpecialties, Inc. acquired the assets of Visyx. We will share in future distributions, if any, subject to certain preferred stock liquidation preferences.

We believe each of the transactions described above have terms no less favorable to us than we could have obtained from unaffiliated third parties.

Compensation Committee Report*

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management and, based on such review and discussion, the Compensation Committee recommended to the Board that the Compensation Discussion and Analysis be included in this Proxy Statement.

Respectfully submitted, The Compensation Committee of the Board of Directors

David C. Hill Bruce Pasternack Chris van Ingen

[•] The material in this Compensation Committee Report is not "soliciting material" is not deemed "filed" with the Commission and is not to be incorporated by reference in any filing of Symyx Technologies, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Security Ownership Of Certain Beneficial Owners And Management

The following table sets forth the beneficial ownership of the our common stock as of March 1, 2008, by (i) each person or entity who is known by Symyx to own beneficially more than 5% of the outstanding shares of common stock; (ii) each director of Symyx; (iii) each of the executive officers named in the Summary Compensation Table; and (iv) all directors and executive officers of Symyx as a group. Unless otherwise indicated, the address of each listed stockholder is c/o Symyx Technologies, Inc., 415 Oakmead Parkway, Sunnyvale, CA 94085, United States.

Name and Address of Beneficial Owner	Amount of Common Stock	Percent of Class(1)(2)
5% Stockholders:		
Tocqueville Asset Management, L.P.(3)		
40 West 57th Street		
19ւհ Floor		
New York, NY 10019	1,701,286	5.06%
T. Rowe Price Associates, Inc.(4)		
100 East Pratt Street		
Baltimore, MD 21202	4,232,267	12.58%
Wells Fargo & Company(5)		
420 Montgomery Street		
San Francisco, CA 94163	2,199,036	6.53%
Oppenheimer Funds, Inc.(6)		
Two World Financial Center		
225 Liberty Street		
11th Floor		
New York, NY 10281-1008	4,201,518	12.48%
Royce & Associates, LLC(7)		
1414 Avenue of the Americas		
New York, NY 10019	4,177,000	12.41%
W. Henry Weinberg, Ph.D(8)	763,734	2.27%
Steven D. Goldby(9)	719,338	2.14%
Isy Goldwasser(10)	664,900	1.98%
Kevin Cronin(11)	88,977	*
Kenneth Nussbacher(12)	71,364	*
Mario M. Rosati(13)	69,125	*
Thomas R. Baruch(14)	64,825	*
Jeryl L. Hilleman(15)	20,777	*
Rex S. Jackson	18,943	*
Richard Boehner	7,249	*
Timothy Campbell	4,535	*
Anthony R. Muller	1,681	*
Gerard Abraham	0	*
Chris van Ingen	0	*
Bruce Pasternack	0	*
David Hill	0	*
Timothy Harkness	0	*
Richard Rosenthal	0	*
All directors and executive Officers as a group (18 persons)	2,498,448	7.42%

^{*} Less than 1% of the outstanding shares of common stock.

- (1) Beneficial ownership is determined in accordance with the rules of the SEC. In computing the number of shares beneficially owned by a person and the percentage of ownership of that person, shares of common stock subject to options held by that person that are currently exercisable or exercisable within 60 days of March 1, 2008 are deemed outstanding. The persons named in this table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them, subject to community property laws where applicable and except as indicated in the other footnotes to this table.
- (2) Percentage of beneficial ownership is based on 33,594,112 shares of common stock outstanding as of March 1, 2008.
- (3) Based solely on a Schedule 13G filed with the Securities and Exchange Commission on February 14, 2008, Tocqueville Asset Management, L.P. has no shared voting power and has sole voting power with respect to 1,536,956 shares and sole dispositive power with respect to 1,701,286 shares as of December 31, 2007.
- (4) Based solely on a Schedule 13G filed with the Securities and Exchange Commission on February 12, 2008, T. Rowe Price Associates, Inc. has no shared voting or dispositive power and has sole voting power with respect to 1,399,077 shares and sole dispositive power with respect to 4,232,267 shares as of December 31, 2007.
- (5) Based solely on a Schedule 13G filed with the Securities and Exchange Commission on February 6, 2008, (i) Wells Fargo & Company has sole voting power with respect to 2,131,837 shares, shared voting power with respect to 560 shares, sole dispositive power with respect to 2,273,342 shares and shared dispositive power with respect to 30,160 shares as of December 31, 2007, and (ii) Wells Capital Management Incorporated has no shared voting power or shared dispositive power and has sole voting power with respect to 685,596 shares and sole dispositive power with respect to 2,199,036 shares as of December 31, 2007.
- (6) Based solely on a Schedule 13G filed with the Securities and Exchange Commission on February 6, 2008, (i) Oppenheimer Funds, Inc. has no sole voting or dispositive power and has shared voting power with respect to 2,201,518 shares and shared dispositive power with respect to 2,201,518 shares as of December 31, 2007, and (ii) Oppenheimer Global Opportunities Fund has no sole voting or dispositive powers and has shared voting power with respect to 2,000,000 shares and shared dispositive with respect to 2,000,000 shares as of December 31,2007.
- (7) Based solely on a Schedule 13G filed with the Securities and Exchange Commission on January 31, 2008, Royce & Associates, LLC has no shared voting or dispositive power and has sole voting and sole dispositive powers with respect to 4,177,000 shares as of December 31, 2007.
- (8) Includes 718,890 shares of our common stock issuable pursuant to stock options exercisable within 60 days of March 1, 2008.
- (9) Includes 675,612 shares of our common stock issuable pursuant to stock options exercisable within 60 days of March 1, 2008 and 2,500 shares held in the name of the Steven Goldby and Florence Goldby Trust, of which Mr. and Mrs. Goldby are trustees.
- (10) Includes 617,759 shares of our common stock issuable pursuant to stock options exercisable within 60 days of March 1, 2008.
- (11) Includes 87,124 shares of our common stock issuable pursuant to stock options exercisable within 60 days of March 1, 2008.
- (12) Consists of 52,500 shares of our common stock issuable pursuant to stock options exercisable within 60 days of March 1, 2008 and 18,864 shares held in the name of the Nussbacher Revocable Trust dated 10/6/99.
- (13) Includes 52,500 shares of our common stock issuable pursuant to stock options exercisable within 60 days of March 1, 2008 and 5,185 held in the name of Mr. Rosati's spouse.

- (14) Includes 52,500 shares of our common stock issuable pursuant to stock options exercisable within 60 days of March 1, 2008.
- (15) Includes 3,249 shares of out common stock held in the name of the Hilleman/Albright Family Trust, of which Ms. Hilleman is a trustee.

Equity Compensation Plans

The following table provides information as of December 31, 2007 with respect to shares of our common stock that may be issued under our existing equity compensation plans.

Number of Securities Remaining Available for Future Issuance Number of Under Equity Securities Compensation to Be Issued Weighted Plans Unon Exercise Average (Excluding		Α	В	C
Remaining Available for Future Issuance Number of Under Equity Securities Compensation to Be Issued Weighted Plans		,		
Available for Future Issuance Number of Under Equity Securities Compensation to Be Issued Weighted Plans				
Future Issuance Number of Under Equity Securities Compensation to Be Issued Weighted Plans				G
Number of Under Equity Securities Compensation to Be Issued Weighted Plans				
Securities Compensation to Be Issued Weighted Plans		Number of		• • • • • • • • • • • • • • • • • • • •
to Be Issued Weighted Plans		•		
Upon Exercise Average (Excluding			Weighted	•
opon pacters		Upon Exercise	Average	(Excluding
of Exercise Price Securities		of	Exercise Price	Securities
Outstanding of Outstanding Reflected in		Outstanding		
Plan Category Options Options Column A)	Plan Category	Options	Options	.
Equity Compensation Plans Approved by Stockholders(1) 6,031,510(3) \$ 24.94 2,654,087(Equity Compensation Plans Approved by Stockholders(1)	6,031,510(3)	\$ 24.94	2,654,087(4)
Equity Compensation Plans Not Approved by	Equity Compensation Plans Not Approved by			
Stockholders(2) 835,933 \$ 10.4716,117		835,933	\$ 10.4	16,117
Total 6,867,443 \$ 23.18 2,670,204	Total	6,867,443	\$ 23.18	2,670,204

- (1) Consists of the 1996 Stock Option Plan, 1997 Stock Option Plan, 2007 Stock Incentive Plan and the 1999 Employee Stock Purchase Plan.
- (2) Consists of the IntelliChem, Inc. 2003 Stock Option Plan assumed in connection with the acquisition of IntelliChem, Inc., the Synthematix, Inc. 2000 Equity Compensation Plan, as amended, assumed in connection with the acquisition of Synthematix, Inc., and the 2001 Non-Statutory Stock Option Plan.
- (3) Excludes purchase rights accruing under our 1999 Employee Stock Purchase Plan which has a stockholder approved reserve of 1,570,370 shares as of December 31, 2007. Under the 1999 Employee Stock Purchase Plan, each eligible employee may purchase up to a maximum of 10,000 shares per annum of common stock at semi-annual intervals on the last U.S. business day of April and October each year at a purchase price per share equal to 85% of the lower of (i) the closing selling price per share of common stock on the employee's entry date into the 12-month offering period in which that semi-annual purchase date occurs or (ii) the closing selling price per share on the semi-annual purchase date. Eligible employees may defer up to 10% of their salary, but not to exceed \$25,000, in any calendar year, to purchase shares under this Plan.
- (4) Consists of shares available for future grants under our 2007 Stock Incentive Plan and issuance under the 1999 Employee Stock Purchase Plan. As of December 31, 2007, an aggregate of 1,570,370 shares of common stock were available for issuance under the 1999 Employee Stock Purchase Plan and 1,083,717 shares of common stock were available for future grants under the 2007 Stock Incentive Plan. The 1999 Employee Stock Purchase Plan provides for annual increases in the number of shares available for issuance under the Plan on the first day of each fiscal year, equal to the lesser of 1% of the outstanding shares of common stock on the first day of the fiscal year, 350,000 shares, or a lesser amount as determined by our Board.

The 2001 Plan, which was in effect as of December 31, 2007, was adopted without the approval of our security holders. The 2001 Plan provides for grants of nonstatutory stock options to our employees and consultants who are not officers or directors. An aggregate of 1,000,000 shares of common stock has been reserved for issuance under the 2001 Plan. As of March 31, 2008, options to purchase 795,275 shares were outstanding and no shares remained available for grant. The 2001 Plan may be amended by the Board at any time or from time to time. The 2001 Plan also contains the an adjustment provision similar to that described above in Proposal No. 3 relating to the amendment of the 2007 Plan. In addition, the 2001 Plan contains a change of control provision that provides that, in the event of a merger or sale of substantially all of our assets, and the successor corporation refuses to assume or substitute for the options granted under the 2001 Plan, the optionees shall fully vest in and have the right to exercise their options for all shares then subject to the option.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Transactions with Related Persons

Mr. Baruch, a former member of our Compensation and Audit Committees, is the founder and Managing Director of CMEA Ventures. Mr. Pasternack, the current chairperson of our Compensation Committee is also a Venture Partner of CMEA Ventures. CMEA Ventures holds a 17.5% interest in Intermolecular, Inc.; Mr. Baruch serves on Intermolecular's board of directors and compensation committee. Steven Goldby, our Executive Chairman, is also a director of Intermolecular, and Dr. W. Henry Weinberg, one of our named executive officers, is a scientific advisory board member of Intermolecular. In August 2006, we invested \$13,500,000 in exchange for approximately 13% of the outstanding shares of Intermolecular. We entered into a Collaborative Development and License Agreement with Intermolecular in March 2005, and an Alliance Agreement in December 2005. Under these agreements, the two companies work together to conduct R&D and other activities with respect to materials and high-throughput technology for use in semiconductor applications. Generally, each party bears its own expenses. These agreements were amended in November 2007. Under the amended agreements, we committed to fund an aggregate of \$2,057,000 in research and capital equipment expenditures. We expect to satisfy the remaining \$643,000 of this commitment in 2008. For the years ended December 31, 2007, 2006 and 2005, we recognized revenue from Intermolecular of \$912,000, \$52,000 and \$88,000, respectively. In 2005, we also recognized a \$20,000 gain from the sale of a fixed asset with a \$130,000 net book value, which was sold to Intermolecular for its original cost of \$150,000. As of December 31, 2007 and 2006, Symyx had deferred revenue of \$84,000 and \$27,000 from Intermolecular, respectively.

Mr. Baruch is also a director of Solyndra, Inc. CMEA Ventures holds a minority interest in Solyndra. We are parties to a Collaborative Research and License Agreement with Solyndra. For the years ended December 31, 2007, 2006 and 2005, we recognized revenue of \$409,000, \$1,228,000 and \$43,000, respectively, from providing research services to Solyndra. As of December 31, 2007 and 2006, we had recorded \$0 and \$24,000, respectively of deferred revenue related to Solyndra. Development activities under that agreement ceased as of February 28, 2007.

In November 2006, we invested \$400,000 in cash and licensed certain sensor technology in exchange for approximately 38% of the outstanding shares of Visyx Technologies Inc. We have a 45% voting right in relation to its shareholdings. CMEA Ventures holds approximately 42% of the outstanding shares of Visyx and has a 49% voting right in relation to its shareholdings. In July 2007, we provided Visyx a \$100,000 loan in exchange for a convertible promissory note on the same terms and conditions as the other principal investor. In November 2007, MeasurementSpecialties, Inc. acquired the assets of Visyx. We will share in future distributions, if any, subject to certain preferred stock liquidation preferences.

We believe each of the transactions described above have terms no less favorable to us than it could have obtained from unaffiliated third parties.

We have entered into indemnification agreements with each of our directors and executive officers. These agreements require us to indemnify such individuals, to the fullest extent permitted by Delaware law, for certain liabilities to which they may become subject as a result of their affiliation with us.

Review, approval or ratification of transactions with related persons

As set forth in our Audit Committee charter, it is our policy that future transactions with affiliates, including any loans we make to principal stockholders or other affiliates, will be on terms no less favorable to us than we could have obtained from unaffiliated third parties. Our Audit Committee will review and approve any transactions required to be disclosed pursuant to SEC Regulation S-K, Item 404. The Audit Committee will also discuss with management the business rationale for the transactions and whether appropriate disclosures have been made. These transactions will then be subject to approval by our Board, including a majority of the independent and disinterested members or, if required by law, a majority of our disinterested stockholders.

Board Independence

As required under the Nasdaq Stock Market ("Nasdaq") listing standards, a majority of the members of a listed company's board of directors must qualify as "independent," as affirmatively determined by the board of directors. Our Board consults with our counsel to ensure that the Board's determinations are consistent with relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent listing standards of Nasdaq, as in effect from time to time.

Consistent with these considerations, after review of all relevant transactions or relationships among each director, or any of his or her family members, and us, our senior management and our independent registered public accounting firm, the Board has affirmatively determined that Messrs. Hill, Nussbacher, Pasternack, Rosati, Harkness and van Ingen are independent directors within the meaning of the applicable Nasdaq listing standards. In making this determination, the Board found that none of these directors or nominees for director had a material or other disqualifying relationship with us. In determining the independence of Dr. Hill, the Board took into account the consulting services Dr. Hill provided to us in fiscal 2007 and continues to provide in fiscal 2008. The maximum amount for which he will be paid for his services is \$3,500, of which \$1,172 was paid in fiscal 2007. The Board does not believe that this consulting arrangement interfered or will interfere with Dr. Hill's exercise of independent judgment in carrying out his responsibilities as a director. In determining the independence of Mr. Harkness, the Board took into account the consulting services Mr. Harkness provided to us in fiscal 2007, prior to his appointment to our Board, in connection with our acquisition of MDL Information Systems, Inc., for which he was paid an aggregate of \$21,750. The Board does not believe that this consulting arrangement interfered or will interfere with Mr. Harkness exercise of independent judgment in carrying out his responsibilities as a director. Mr. Goldby, our Executive Chairman, and Mr. Goldwasser, our Chief Executive Officer, are not independent directors by virtue of their employment with us.

Other than as described above, there were no transactions, relationships or arrangements in 2007 not disclosed as related person transactions that were considered by the Board of Directors in determining that the applicable independence standards were met by each of the directors.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table summarizes the aggregate fees billed to us by Ernst & Young LLP for various services provided for the years ended December 31, 2007 and 2006 (in thousands):

	= ==	Fiscal Year Ended (in thousands)			
Service Category		2007	2006		
Audit Fees	\$ 1,	676	935		
Audit-Related Fees		185	60		
All Other Fees		<u> </u>	2		
Total	\$ 1,	861 \$	997		

Audit Fees – Aggregate fees were for professional services rendered for the audits of our consolidated financial statements, limited reviews of our unaudited condensed consolidated interim financial statements and internal control over financial reporting, issuances of consents, and assistance with review of documents filed with the SEC.

Audit-Related Fees – Aggregate fees were for services related to statutory audits, general accounting consultations, internal control, revenue recognition consultations and services related to a spin-off of our sensor business completed in 2006.

Tax Fees - Aggregate fees were for services related to tax compliance, tax and planning advice.

All Other Fees - Aggregate fees were for acquisition due diligence and access to an on-line research database.

Audit Committee Pre-Approval Policy

Pursuant to its policies, the Audit Committee pre-approves all audit and non-audit services provided to us by the independent registered public accounting firm. According to the Audit Committee charter, this pre-approval authority may be delegated to a single member of the Audit Committee and then reviewed by the entire Audit Committee at the Audit Committee's next meeting.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SYMYX TECHNOLOGIES, INC. (Registrant)

Date: May 12, 2008 /s/ Isy Goldwasser

Isy Goldwasser Chief Executive Officer (Principal Executive Officer)

Date: May 12, 2008 /s/ Rex S. Jackson

Rex S. Jackson Executive Vice President, Chief Financial Officer

(Principal Financial and Accounting Officer)

EXHIBIT INDEX

Exhibit

Number Description of Document

- 31.1 (1) Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002.
- 31.2 (1) Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002.
- (1) Filed herewith.

